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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,452	02/12/2004	Satoshi Harada	071469-0307698	3597
909	7590	10/06/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			FRANK, RODNEY T	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
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DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/776,452	<b>Applicant(s)</b> HARADA ET AL.	
	<b>Examiner</b> Rodney T. Frank	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/12/04; 3/24/05</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21, 24, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 21 recites the limitation "the APC system" in the last line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

4. Claims 24 and 25 recites the limitation "said factor" in the first line of the claim.

There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-21 and 26-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (U.S. Patent Number 5,461,570; hereinafter referred to as Wang). Wang discloses a computer control system for optimizing process parameters in an automated production line for producing contact lenses. The system comprises a plurality of process controllers for controlling one or more process stations of the production line, each of the controllers regulating a plurality of process control

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devices that each control specific production parameters used in the automated manufacture of contact lenses at the process station(s). An automated lens inspection device automatically evaluates each contact lens produced and generates inspection data for each contact lens, and a polling device polls each of the process controllers on a frequent basis to acquire process control data for each period. Further included is a correlating device for correlating the inspection data to the process control data and the contact lens data to optimize process parameters used in the production of contact lenses. A relational database is also provided for storing the process control data, the contact lens data and the inspection data received from the correlating device (Please see the abstract).

7. In regard to claim 1, the claims are currently directed toward a generic control process. Therefore, the one of ordinary skill in the art would be able to modify the various parameters taught by Wang in order to create a script that gives the specific parameters required for the claimed environment. Claim 1, in the broadest sense, requires a program to be executed to generate values that can be plotted out. With this in mind, Wang discloses the method of claim 1, as it is capable to perform such a function in any given environment or process, as defined by the user or programmer. One of ordinary skill in the art would apply the method disclosed in Wang to a process, for example, to ensure quality semiconductors are being produced from the manufacturing process, since the method in Wang is inherently capable of performing such a function.

Specifically with reference to claim 1, Wang discloses the general subject matter of the claim in column 11, in the section titled "Control Server". A method is described whereby at system startup, the control server reads and processes startup configuration files (i.e. an auto-configuration script), where various files are generated that the Control server will work with (i.e. an auto-configuration program), and column 25, beginning with line 37, describes how a process parameter plot is generated (i.e. SPC chart generation).

With regard to claim 2, column 10 lines 18 through 26, for example, is a section of the Wang reference that discloses that parameters and flags are generated.

With regard to claim 3, in column 22, a procedure for producing a histogram from the data is disclosed.

With regard to claims 4-6, the automatic calculation of control limits is disclosed. Column 21, for example, discloses how various control limits (i.e. max and min values) are calculated/determined.

With regard to claim 7, column 22 lines 18 through 43 describes a process whereby a specific range of data can be used.

With regard to claims 8 –11, column 12 lines 4 through 31 disclose the use of mean and standard deviation to find parameters for data.

With regard to claims 12-21, Wang discloses in column 27 lines 21-27 the use of an operator controlled interface for optimization purposes and in column 28, lines 28 through 46 disclose the use of a chart with data (i.e. a spreadsheet) to specify data.

With regard to claim 26-35, though the exact parameters for establishing the limits, as claimed, are not disclosed, the use of various program parameters and values in order to optimize a program would be obvious to one of ordinary skill in the art at the time of the invention as one would be motivated to obtain values that are desired and if those values are not obtained, then various adjustments and changes to the program software would be made in order to maintain the best results for the desired outcome.

With regard to claims 36 and 37, although not specifically disclosed, the accessing of information on a computer via the internet is well known to one of ordinary skill in the art and would be obvious to use with the teachings of Wang, for example, to provide remote monitoring of the system.

8. Claims 1, 3, 4, 6, 9, 11, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangrulkar (U.S. Patent Number 5,586,041). Mangrulkar discloses a method and system for monitoring the operation of a machine having a traversing tool or die member, based on a plurality of features extracted from a process signature. The method includes defining the plurality of features, each feature representing a parameter associated with the process of forming the parts, and operating the machine so as to produce a predetermined number of production parts while collecting a production operating signature. The method also includes extracting the feature values from the production operating signature to obtain production feature values, and comparing the production feature values to predetermined operating limits which represent limits within which acceptable parts are formed (Please see the abstract).

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9. In regard to claim 1, the claims are currently directed toward a generic control process. Therefore, the one of ordinary skill in the art would be able to modify the various parameters taught by Mangrulkar in order to create a script that gives the specific parameters required for the claimed environment. Claim 1, in the broadest sense, requires a program to be executed to generate values that can be plotted out. With this in mind, Mangrulkar discloses the method of claim 1, as it is capable to perform such a function in any given environment or process, as defined by the user or programmer. One of ordinary skill in the art would apply the method disclosed in Mangrulkar to a process, for example, to ensure quality semiconductors are being produced from the manufacturing process, since the method in Mangrulkar is inherently capable of performing such a function. With this in mind, Mangrulkar discloses the method of claim 1. Specifically beginning in column 4 with line 61 and ending in column 5 with line 42, Mangrulkar discloses a method whereby at system startup, the can input parameters for defining a startup configuration (i.e. an auto-configuration script), where these definitions, if defined and stored that information is accessed and read (see column 12 lines 1 through 10; i.e. an auto-configuration program), and column 8, beginning withy line 66 through column 9 line 52, describes how a SPC chart is generated.

With regard to claim 2, column 5 lines 3 through 42, for example, is a section of the Mangrulkar reference that discloses that parameters and flags are generated.

With regard to claim 3, in column 8, beginning withy line 66 through column 9 line 52, a procedure for producing a SPC from the data is disclosed.

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With regard to claims 4 and 6, the automatic calculation of control limits is disclosed. Column 9, for example, discloses how various control limits (i.e. max and min values) are calculated/determined.

With regard to claims 9 and 11, figure 4a and column 9 disclose the use of mean and standard deviation to find parameters for data.

With regard to claims 22-25, the generation of the SPC chart is disclosed in column 8, beginning with line 66 through column 9 line 52. Though the Mangrulkar reference does not disclose "run rule evaluations" per se, in column 12, Mangrulkar discloses the use of specific subgroups being defined to determine specific data used to generate the SPC charts. This subgroup of data is considered a functional equivalent process to the run rule evaluation as claimed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RTF  
October 3, 2005



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